

What is claimed is:

1. A data transfer control system for data transfer through a bus, comprising:

5 a port controller which controls a plurality of ports including a first port for connecting with a first electronic instrument and a second port for connecting with a second electronic instrument; and

a bus reset issue controller which issues a bus reset that clears node topology information,

10 wherein the port controller sets the second port to a disabled state and the bus reset issue controller issues the bus reset to cause the first electronic instrument connected with the first port to acquire an access right.

2. The data transfer control system as defined in claim 1,

15 wherein the port controller sets the second port to an enabled state after the bus reset has been issued and the first electronic instrument connected with the first port has acquired the access right.

3. The data transfer control system as defined in claim 2, further comprising:

20 a packet processor which performs processing for transferring a packet used to resume from a suspended state to the second electronic instrument connected with the second port after the second port has been set to an enabled state and the second electronic instrument has been detected to be in a suspended state.

4. The data transfer control system as defined in claim 3,

25 wherein the bus reset issue controller issues a bus reset after the packet used to resume from the suspended state has been transferred to the second electronic instrument.

5. The data transfer control system as defined in claim 2,

wherein the port controller sets the second port to a disabled state again when the first electronic instrument connected with the first port has lost the access right after
5 the second port has been set to an enabled state.

6. A data transfer control system for data transfer through a bus, comprising:

a port controller which controls a plurality of ports including a first port for connecting with a first electronic instrument and a second port for connecting with a
10 second electronic instrument,

wherein the port controller sets the second port to a disabled state when the power for the data transfer control system has been turned on.

7. The data transfer control system as defined in claim 6,

15 wherein the power for the data transfer control system is turned on when a port of the first electronic instrument has been connected with the first port.

8. An electronic instrument for expanding a function of a first electronic instrument connected with a first port, the electronic instrument comprising:

20 the data transfer control system as defined in claim 1; and

a plurality of ports including the first port for connecting with the first electronic instrument and a second port for connecting with a second electronic instrument.

25 9. An electronic instrument for expanding a function of a first electronic instrument connected with a first port, the electronic instrument comprising:

the data transfer control system as defined in claim 6; and

a plurality of ports including the first port for connecting with the first electronic instrument and a second port for connecting with a second electronic instrument.

5 10. The electronic instrument as defined in claim 8,

 wherein the port controller sets the second port to a disabled state when a port of the first electronic instrument has been connected with the first port and the power for the electronic instrument has been turned on.

10 11. The electronic instrument as defined in claim 9,

 wherein the port controller sets the second port to a disabled state when a port of the first electronic instrument has been connected with the first port and the power for the electronic instrument has been turned on.

15 12. A program which causes a data transfer control system to function as: a port controller which controls a plurality of ports including a first port for connecting with a first electronic instrument and a second port for connecting with a second electronic instrument; and a bus reset issue controller which issues a bus reset that clears node topology information,

20 wherein the port controller sets the second port to a disabled state and the bus reset issue controller issues the bus reset to cause the first electronic instrument connected with the first port to acquire an access right.

13. A program which causes a data transfer control system to function as: a port
25 controller which controls a plurality of ports including a first port for connecting with a first electronic instrument and a second port for connecting with a second electronic instrument,

wherein the port controller sets the second port to a disabled state when the power for the data transfer control system has been turned on.

14. A data transfer control method for data transfer through a bus, the method
5 comprising:

controlling a plurality of ports including a first port for connecting with a first electronic instrument and a second port for connecting with a second electronic instrument to set the second port to a disabled state; and

issuing a bus reset that clears node topology information after the second port
10 has been set to a disabled state to cause the first electronic instrument connected with the first port to acquire an access right.

15. The data transfer control method as defined in claim 14, further comprising:

setting the second port to an enabled state after the bus reset has been issued
15 and the first electronic instrument connected with the first port has acquired the access right.

16. The data transfer control method as defined in claim 15, further comprising:

transferring a packet used to resume from a suspended state to the second
20 electronic instrument connected with the second port after the second port has been set to an enabled state and the second electronic instrument has been detected to be in a suspended state.

17. The data transfer control method as defined in claim 16, further comprising:

issuing a bus reset after the packet used to resume from the suspended state has
25 been transferred to the second electronic instrument.

18. The data transfer control method as defined in claim 15, further comprising:

setting the second port to a disabled state again when the first electronic instrument connected with the first port has lost the access right after the second port has been set to an enabled state.

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19. A data transfer control method for data transfer through a bus, the method comprising:

controlling a plurality of ports including a first port for connecting with a first electronic instrument and a second port for connecting with a second electronic

10 instrument; and

setting the second port to a disabled state when the power for a data transfer control system has been turned on.

20. The data transfer control method as defined in claim 19,

15 wherein the power for the data transfer control system is turned on when a port of the first electronic instrument has been connected with the first port.